Turning Birdshot into Slugs for Self-Defense

Introduction by Steve: This is a guest post is written entirely by Y-Man. He has shown incredible ingenuity in a country that severely restricts the firearms and ammunition civilians can purchase. I have previously blogged about Y-Man's exploits.

Imagine that all you could ever get in terms of ammunition is this:

Ordinary 12 gauge, BB Birdshot.

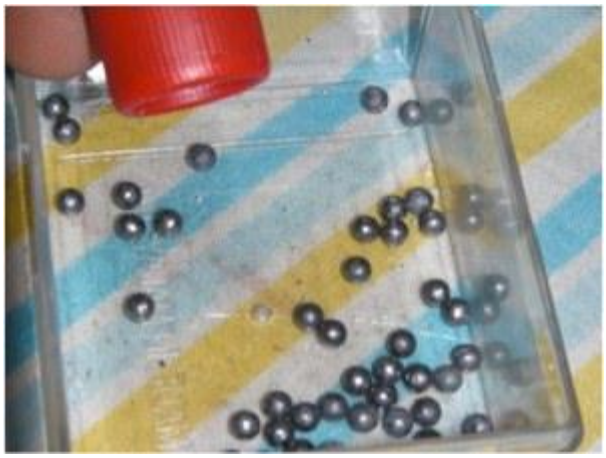
Well, I got some of that, but was I satisfied? NO! I needed something I could really use to "Reach out and touch…" Something that would penetrate at range with some accuracy.
I got a mold fabricated: 25.3mm thick Steel, drilled through at 16.5mm wide, and drilled right through to the other side.

A nut was welded to the bottom carefully to take a 10mm bolt that would serve to create a hollow on the planned slugs.

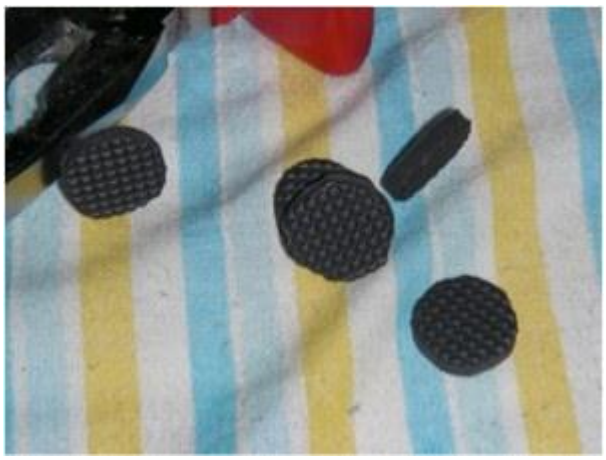
I opened up a 12 gauge BB shell using a basic knife to remove the lead shot.

Using modified sharp-nose plies I removed the plastic cover of the Shell.

The lead shot is poured out and cleaned, and the plastic bits removed…



A felt wad is pushed into the empty shot-shell, seated very well into the shot-cup. The diameter of the wad is same with the Shot-Shell.



The Lead Shot is poured into a Ladle, and melted. Working with Lead is VERY hazardous: ensure eyes are protected, use safety gloves, ventilate properly!

The Mold is carefully placed on a good flat surface.

Molten Lead is carefully poured into the mold.

The Bolt at the bottom is unscrewed carefully. NO wiggling it around!

Use a pointed item to push the cooled slug out…

You may have to knock it a bit to get it out…

This is the produced Slug…

There is a correctly centered hollow. So centre-of-balance is forward, like a Shuttle-cock…

More pictures of the finished slugs. Nice factory-like finish…

Next: Insert the Slug into Shell case…

Some force is needed to get the Slug into the Shell-case. This is due to the Roll-crimp which was not touched originally…

You can see the Slug inside the Shell-case, centrally placed, snug against the crimp…

LAST STEP: Glue or epoxy is used to seal and waterproof the Shell-case properly. Left standing upright to dry/ cure.

Glue or epoxy is used to seal and waterproof the Shell-case properly. Left standing upright to dry/ cure.

Slug is ready to be FIRED!

I test-fired a few slugs today (16 August 2009)! Perfect performance (for what i had at hand…).

5 slugs fired at 30 metres (33 yards, 98.4 ft). Target was piece of metal plate about 1.5ft x 1ft, 2mm thick. 3” x 3” bullseye painted on.

Target taken at 30 meters distance.

Close up.

Distance Fired: 33 yards
Sights: Bead sight
Ammunition: 5 home-made slugs

5 shots on target. Not bad!
1 round high/ left
4 rounds in/ near the bullseye.

This looks like a 2” to 3” group at 33 yards!

I couldn’t wish for better from home-made foster slugs!

MASS PRODUCTION COMMENCES! LET THE ZOMBIES COME!! 🙂

—

Y-man

16 August 2009

51 Responses to “Turning Birdshot into Slugs for Self-Defense”

1. **Griffin** on 24 Aug 2009 at 10:19 pm link comment

Wow! I am greatly impressed! he could possibly make this a business for himself…

2. **AB** on 24 Aug 2009 at 11:21 pm link comment

I’m guessing if he did turn this into a business, he’d be running counter to his country’s laws regarding the sale and distribution of unauthorized ammunition. If all he can get is birdshot…

Anyhoo.

Very nice work by Y-Man.

3. **CORNELIUS** on 24 Aug 2009 at 11:27 pm link comment

This is excellent, Steve. Thanks to Y-man for sharing your brilliant idea.

Y-man, have you tried loading the hollow end forward? I wonder if they might work as expanding hollow-point slugs. Thanks again and keep up the good work.

4. **War Wolf** on 24 Aug 2009 at 11:52 pm link comment

Bravo Y-Man! Necessity truly is the mother of invention. Your accuracy is outstanding too. I could barely do that with my store-bought slugs and a rifled barrel!

5. **Fred** on 25 Aug 2009 at 12:38 am link comment

Try this instead: take a sharp knife and cut through the case all the way around, at the level of the wadding. The case separates into a 'slug'. Won't have the performance at a distance but in a pinch it's quicker and easier.

6. **B Woodman** on 25 Aug 2009 at 1:00 am link comment

Damn! Excellent work, having to make-do and improvise.

Remind me to never cross Y-Man in an armed confrontation situation.

7. **Matt Groom** on 25 Aug 2009 at 2:05 am link comment

Nice work, Y-Man. You might try to heat up your mold on a stove to make the slugs smoother, just make sure you have a proper handle or heavy gloves to avoid burning yourself. Grasping with a towel or oven mit seems to work well. Heating the screw with a blow torch will smooth out the edges of the slug, but anything with a cavity like that is usually a nightmare to cast perfectly. I bought a Lyman Devastator mold in 9mm and it is a horrifyingly difficult mold to use.

8. **Veeshir** on 25 Aug 2009 at 2:30 am link comment

There's a book called Valdez is Coming.
The movie with Burt Lancaster is spot on except they've since cut out a few things.

In one part in the book, Valdez opens his shotgun shells loaded with, as I recall, bird shot, and pours in heated tallow so that when it cools, and "sets" it holds the bird shot together.
He says it keeps the spread down and packs a huge wallop.

Does that make sense? Would it work? Will I destroy my shotgun if I try it?

http://www.amazon.com/review/R2EL83IO3BJ83/ref=cm_cr_pr_viewpnt#R2EL83IO3BJ83
That guy mentions that they cut the scene from the DVD.

9. **Steve** on 25 Aug 2009 at 2:32 am link comment

Veeshir, hmmm … I am not sure if it would work.

10. **Hick 22** on 25 Aug 2009 at 3:00 am link comment

This has got to be the most f***ing awesome thing that I have ever seen in my life so far. Thanks to you, I'll never use birdshot again
And I'm gonna hand this little, oops! I should say: Big assed, ingenious, brilliant, f***ing awesome Idea down through my family line for generations to come.

I'd say put a patent on that thing, and make some dough, but you'd probably get in trouble with the A.T.F.

YOU ARE A GENIOUS!!!
and don't ever let anyone tell you otherwise.

Always a fan.

Damian Sebastian.

11. **Firehand** on 25 Aug 2009 at 3:28 am link comment

Someone once wrote of trying to use flour as a buffer in shotshells; it picked up moisture and hardened and held the shot together when fired. It broke up immediately after hitting a target.

If you could keep it from leaking out of the shot cup, you could pour some epoxy into the shot to bind it together; would add very little weight, but I think it would also break up after impact.

12. **Firehand** on 25 Aug 2009 at 3:30 am link comment

You know, if you had a tap but not a welder, you could drill a smaller hole through the plate, thread it, and then drill to the larger size, leaving a threaded section on one side.

13. **Matt Groom** on 25 Aug 2009 at 4:30 am link comment

I'm not sure how good your accuracy would be Veeshhir, but I highly doubt that it would harm your shotgun, even if it was choked. Most likely, the tallow would break up before any damage could be done. The Tallow might get your powder wet and keep it from igniting if you weren't careful. It probably would make a mess inside your barrel too…

14. **Mu** on 25 Aug 2009 at 5:41 am link comment

I wouldn't try the tallow method with standard shells, the extraction resistance might be too high and give you a huge pressure spike. But if you have the kind that hold the shot in a little separate cup, and you fill just the cup making sure that no tallow leaks to the outside of the cup and sticks the cup to the shell, it might work. I'd still use an expendable gun, and a long string to trigger from behind something solid.

15. **NoneMoreBlack** on 25 Aug 2009 at 6:30 am link comment

So it is illegal to sell slugs but not to possess or to use them?

16. **Steve** on 25 Aug 2009 at 9:12 am link comment

Firehand, close range range that would work, the problem is that it would tumble and roll with the weight being unevenly distributed. Yman has achive impressive accuracy,

17. **Whatever** on 25 Aug 2009 at 10:37 am link comment

A longer bolt and a wrench can be used to push out the slug.

18. **FarmerMechanic** on 25 Aug 2009 at 1:14 pm link comment

I proposed this earlier this year only what I wanted to do was empty out the small bb's and weigh the load and replace with 00 buck of the same weight. But what you describe is just as good. Now would this work with say a upland gamebird shell? It is lead shot.. For 25 bucks at wally world you get 100 rounds.. What is the felt material made from? just felt or something else?
Thanks
FM

19. **iMick** on 25 Aug 2009 at 1:33 pm link comment

Whenever I was chasing feral pigs and had run out of buckshot, I used to make my own poor man's slugs by serrating the shotshell case of duck shot in the middle where the plastic wad would be. The case does not uncrimp when fired and splits in two, keeping all the duck shot together which is then pushed out by the wad. Sounds crazy but is extremely deadly up close on pigs within 20-25m, needless to say this only worked in single or double barrel shotties, but alas, thats all we have down under 

20. **Carl** on 25 Aug 2009 at 1:36 pm link comment

Oh man this is so cool. Supreme DIY engineering. I can hardly believe that grouping. And all the slugs went through the target point first as well 🙂. Epic, flawless win.

Suggestion for next project: AP rounds. Perhaps a steel slug or some subcaliber sabot thingy. Just be careful when trying out new things. I mean, if something goes wrong it could perhaps blow up in your face. I think I'd set up some kind of remote firing rig if I was doing this.

21. **Dr. Dave** on 25 Aug 2009 at 2:50 pm link comment

Oh, that's just fantastic. I'm booking marking this post now.

22. **ErnestThing** on 25 Aug 2009 at 3:18 pm link comment

While it just seems like a neat trick, it can be a real money saver when slugs cost about a buck, and birdshot can be had for around 20 cents in bulk. Particularly for those who simply can't afford proper home defense ammo.

23. **Gerry N.** on 26 Aug 2009 at 9:01 am link comment

A block of hardwood makes a useful field expedient mold. If you can find some, a block of aluminum is much easier to machine than is steel.

Tallow, crisco, or paraffin wax poured into a shotshell will bind loose shot, making it in effect a short range slug. Pry open the shell, pour in your binding agent, and recrimp. Water Glass, AKA sodium silicate is a far better sealing agent for shotshells than epoxy, find it at the drugstore. An el-cheapo hot glue gun works amazingly well, too.

Yes, it works. Sometimes more effectively than others, but nothing is perfect.

Gerry N.

24. **Henry Bowman** on 26 Aug 2009 at 10:22 am link comment

OK, so what country are we talking about here?

25. **Y-man** on 27 Aug 2009 at 5:22 am link comment

Thanks all: I learnt from all of you, really…
About the accuracy: I went to a Military School, and from the age of 11; was trained in the use, maintenance and care of the FN 7.62mm SLR especially. I was also trained in the use of the 9mm Browning, and the Sterling SMG. We went to the range for live fire exercises at least once every 3 months too for 3 years.

Though, in reality: I had my own DEEP interest in all of these; for example, I learnt by myself to strip and assemble the FN SLR blindfolded and I remember my best time was 3 minutes ! (I was tiny 13-year old then, I had to cock the rifle with both hands!)

I appreciate the kind words.

@ Firehand;

Thanks: thats another good idea. Only that: what happens when the thread wears out? I would still have to weld a nut there….

@ NoneMoreBlack:

To be honest: very FEW people know about slugs here. A shotgun catridge (As we call them here…) is a shotgun catridge, and it contains many pellets, (Or "bullets", as most people say here: so you hear of someone having 24 "bullets" extracted from his leg after an unfortunate robbery…) A shotgun catridge is "red" with a "yellow band". "It is for hunting."

It is mainly “camouflage” and “perception”: I bought 100 shotgun catridges legally, and I still have 76 shotgun catridges “legally” in my possession. Simple.

@ Whatever;

The ones I have started with: the thread of the bolt actually is surrounded by molten lead. You have to “unscrew” that out of the slug. You have given me a better idea: a smooth, tapered bolt, with threading near the head. This can be used as you suggested. Thanks.

@ Mu and Carl:

I assure you in all my testing and experimentation (Based on much research and the principle of “Safety FIRST…”) I tied that shotgun to many a tree, and used many lengths of string to pull the trigger from a very safe distance!

@ Gerry N.
Aluminium in blocks is not available cheaply: by coincidence I just discovered I could get nice, thick blocks of Aluminium from the cooling thingy of discarded PCs: you know the thick aluminium grills that the cooling fans clamp to, then the whole thing clamps directly on top of the processor? Nice thick aluminium blocks once you cut off the cooling fins…

If I may ask: what other name for “Water glass/ Sodium Silicate”? Another thing I have used is clear nail varnish: but that runs and doesn’t solidify quickly. I actually use Emery all purpose glue. It seems to settle well into the small crevices, but doesn’t run down into the shell. It also “cures” properly.

@ Henry Bowman;
NIGERIA. If you see Steve’s intro to my guest-blog: he mentions some previous posts on some of my stuff. It clearly is titled: “A Nigerian’s Shotgun”…

Sorry to sound defensive: we aren't all fraudsters here: we have a lot of creative, imaginative, intelligent, law-abiding, hard-working people here too.

Many thanks all.

26. **JD** on 27 Aug 2009 at 6:49 am link comment

Seems like it would work fine great as long as you're using shotshells with rolled crimps, not the folded crimps common on most of the upland bird shells in the US. I just checked my stash, 4 brands of #8 thru #4, and they were all folded crimps.

I think some experimentation may be necessary to see if fold-crimped birdshot can be turned into roll-crimped slugs.

27. **Y-man** on 30 Aug 2009 at 10:43 am link comment

Hi guys, a quick update…
I got a 4-hole mold made! Out of steel, four 17mm holes (For slugs that fit better in the bore: and can still be seated easily within the shot-cup without bulging it.) I am still using the same quantity of shot: the same shot poured out of the shell is melted for the slug. (Carefully!)

The bolts at the bottom are bigger too: instead of the 10mm of the old mold, this is 12mm. So this leaves a bigger hollow cavity in the Slug.

The hollow cavities are gauged to be deeper now, so I now have a longer slug: the old slugs were about 17mm long: these new slugs are 22mm long. (No need for the felt wads anymore.) The slugs seat properly in the shot-cup now, and seal very well against the roll-crimp. A few dabs of clear nail varnish to water-proof: and good to go.

The larger hollow cavities are now about 2/3 of the length of the entire slug: slug is 22mm long, hollow cavity extends into it as much as 16mm. This

really puts the slugs point-first even after leaving the muzzle: no tumbling at all. Accuracy is even more phenomenal…

Thanks guys!

28. **Steve** on 30 Aug 2009 at 1:27 pm link comment

Y-man, thanks for the update.

29. **ken smith** on 31 Aug 2009 at 2:06 am link comment

Do NOT try to bind birdshot with wax or tallow to create a slug. It leaves a deposite in the barrell which will eventually cause an obstruction–it may take 10 shots or 2–impossible to predict. About 40 years ago I blew up a shotgun doing this and over the years have known several others who have done the same. That technique is an old story told around bars (and now blogs) by people who have never really tried it.

30. **Carl** on 31 Aug 2009 at 8:19 am link comment

Have you considered putting the shot pellets in the mold and heating it directly?
Perhaps this would be more efficient for mass production. Lots of steel to heat I guess, but if the holes are drilled close to one another (honeycomb style) this is reduced.
Then you could size the mold to fit exactly on your stove/heat source, and get get the correct lead amount every time without having to heat each shot load separately.

31. **Y-man** on 01 Sep 2009 at 6:48 am link comment

@Carl,
Thanks for the idea: sadly, wont work. Imagine the time it takes for mold to cool; safely extract slugs; then re-heat for next batch? Mold will be TOO hot to handle…

32. **Luke F** on 01 Sep 2009 at 6:06 pm link comment

Well done Y-man. Bloody brilliant use of available resources.

There's bugger all angry creatures you couldn't stop with a few of those bad boys so I imagine you would feel a lot safer having access to such ammunition if you ever needed it. (I sincerely hope you don't)

I tell you, I am going through the pains of trying to pick the right mould for good hunting slugs for my smoothbore 12 and your achievements make me wonder whether I and so many others like me have been carried away by all the options available to us, rather than just perservering and making what we have work.

Congratulations and well done.

Luke, Cairns, Australia

33. **John** on 08 Sep 2009 at 9:48 pm link comment

G`day in the process of producing a bronze mold for sulgs like this at the moment myself, have been promising a good frend who lives in a tiny little village on the north side of Papua New Ginea I would make one for him for over 2 years now.The men there have been making slugs with unfired clay mouled around timber patterns for years and years and putting plenty of meat on the table with them.I tell you they kill plenty of wild bufflo and boer with these slugs and almost never miss They use old battery lead and the shotguns are mostly made with 3/4" water pipe!

I dont think you need to worry to much about shape just so long as they fit well and are front heavy.By the way Im planing to copy some old slugs given to me by an old bushie who reckons they would punch holes in just about anything if you had the right amount of power behind them.
Best of luck,
John.

34. **DrStrangegun** on 10 Sep 2009 at 9:18 am link comment

Wax? Glue? Nah. Think outside the box.

Cornstarch paste. It "hardens" under pressure, surely you've seen the footage of someone stomping across a tub of cornstarch in water, then stopping at the end and sinking to their waist.

It's better than just that though…. the "glom" of shot and corstarch hit their target and expend energy. At that point, there's no pressure, so the cornstarch goo begins to flow and "leak" away, and even better yet, dissolve in flowing blood. After a few minutes you've got a pile of birdshot in the wound with nothing holding it together.

35. **Steve** on 10 Sep 2009 at 12:18 pm link comment

DrStrangegun, interesting idea … give it a try and tell us how well it works 

36. **psl sniper** on 11 Sep 2009 at 1:40 pm link comment

made a copy of the mold out of aluminum blocks works fantastic thanks.

37. **George** on 23 Sep 2009 at 7:43 am link comment

Hi Y man-brilliant idea.But if u live in the British Isles and doe not have shotugn slugs specified on your FAC then what your doing-possesing shotgun slugs is illegal.You could have a maximum 5 year sentence.

38. **Y-man** on 28 Sep 2009 at 1:53 am link comment

@George,

Thanks for the concern. I DON'T live in the British Isles: I live in a former colony of Britain: Nigeria. Our laws are quite vague on the issue of slugs, and like I said above: a shotgun catridge (which is legal) is a shotgun catridge… By the way, what's the full meaning of FAC?

39. **Spike** on 05 Oct 2009 at 3:01 pm link comment

F.A.C.

Firearms certificate.

Hope this helps 

40. **Jude** on 29 Oct 2009 at 1:58 am link comment

Y-Man…

This incredible idea of yours is going to save me an incredible amount of cash.

I actually have looked around for the cheapest place to sell slugs to practice with BUT now I got hold of this info I can simply keep purchasing #7 1/2 shot in 500rnd.cases

41. **William** on 04 Nov 2009 at 1:58 am link comment

What is the dimensions needed for the mold to do this with a 20 gauge?

42. **Matt Groom** on 05 Nov 2009 at 3:14 pm link comment

The size of a 20 Gauge bore is 0.615”/15.63mm. The length would depend on how heavy you’d want your slug to be, thickness of the material you have on hand, how much birdshot is in the shell, etc. I recommend you look at some commercial molds and try to duplicate those. If you take to halves of material and grind them flat and smooth so that they face each other, you can make a mold which is much faster to use. All you need is a belt sander and a drill press to make a mold. Good luck!

43. **Ben** on 15 Nov 2009 at 3:12 pm link comment

this is a very smart idea, and it worked almost perfectly. But each shell only held 1 slug per shell. which lowers the chance of hitting a home invader in the face. plus they were heavy, so a short range. if he made them smaller, he could be very successful.

44. **wolff** on 17 Nov 2009 at 2:55 pm link comment

Great idea, well-presented and needed, thanks for sharing: Someone once said “knowledge not shared is lost.”

Using existing bird shot is certainly simple, and another idea is to use linotype or wheel weights instead of the bird shot — linotype is often hard to find these days, but was a preferred metal for target shooters who cast their own bullets. Wheel weights are easy to get, though require more prep to ‘purify’ and melt down (hint: melt the metal and toss in some borax as flux to get the impurities to rise to the surface to be spooned off), I think they are a bit harder than pure lead, too, but not too hard!

I suggest this in case the shells are lead-free, which is gaining ground.
good luck!

45. **comi** on 18 Nov 2009 at 12:21 am link comment

Nice nail

46. **BK** on 30 Nov 2009 at 1:28 pm link comment

While this might work in a pinch there is some dangerous info in the comments such as:
"Try this instead: take a sharp knife and cut through the case all the way around, at the level of the wadding. The case separates into a 'slug'. Won't have the performance at a distance but in a pinch it's quicker and easier."
Check the OD of a hull 12ga is around .790, now the bore of a 12ga is around .729 in front of the forcing cone and then we have the choke to deal with, .725 to .695 or smaller for the turkey style chokes. No way is that going through and if the crimp opens and lets the shot and wad go the hull will still be stuck in the barrel and the next round will be a disaster!

47. **magnus** on 03 Dec 2009 at 8:00 am link comment

You're the epitome of wasted talent

48. **Daniel** on 03 Dec 2009 at 11:11 am link comment

Hey, thank's for sharing, it's very useful for me, I own a ranch in México, and gone a try to make it the same way. The accuracy is very good.
Greetings.

49. **mitchshrader** on 10 Dec 2009 at 8:11 am link comment

I'd have to agree that ammo modification is a tricky subject, and very prone to destructive errors.

On the detail of 'deposits left in barrel' it matters whether the binding substance makes contact with the inner surface of the barrel.

Using Elmers glue, plain white schoolroom variety, and applying CONSISTENT amounts to the pellets CONTAINED IN A SHOT CUP, with care not to overfill..is about as safe as you can get doing this field expedient modification. It's very very important not to blow your gun up and die, you'ld never live down the embarassment. Another useable binder is dop wax, jewelers high temp wax for holding stones temporarily while cleaning or polishing.

Elmers glue can be thinned slightly if necessary and applied directly to pellets, but the dop wax is harder to use. It needs melting and careful application to get it deep enough in the shotcup to bind the lead together. I'd not worry about blowing the gun up as long as all applied binders are TOTALLY contained inside the cup.

And fwiw, skeet or hunting loads of FINE shot are ideal candidates for some stickum. They're the cheapest, and the most useless for predators. Add half a gram of Elmers or wax, and you'll have non-survivable SD ammo or close range hunting ammo. Your method produces better results and more accurate ones, but mine is cheap, fast, and intended as *last* resort. Here, 1 oz. shotgun slugs are still findable under 60c each (walmart 15 rd value pk) and 00 Buckshot @ about 70c.

I'd strongly recommend that anyone attempting to modify ammo respects all safety precautions that can be feasibly maintained..and don't blow your gun up OR die.

50. **Doug Glass** on 18 Jan 2010 at 6:03 am link comment

Totally a waste of time and energy. You can buy the already made slugs for next to nothing or you can get a mold to recast the lead for a $17 USD.

51. **GeoBear** on 18 Jan 2010 at 2:36 pm link comment

Doug Glasson “Totally a waste of time and energy. You can buy the already made slugs for next to nothing or you can get a mold to recast the lead for a $17 USD.”

Did you just not read the intro, the linked article or the comments, or did you just look at the pretty pictures?

Where exactly does one purchase molds and slugs (for next to nothing) for about $17 USD in Nigeria?